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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,938	12/27/2001	Hiroki Takeuchi	046103-5011	7305
9629	7590	06/03/2005	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			SELLERS, ROBERT E	
			ART UNIT	PAPER NUMBER

1712

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/026,938

Applicant(s)

TAKEUCHI ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-11 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1, 3, 4, 6-11 and 15-18 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 1712

1. The election with traverse of the coloring agent of claim 4 in the reply filed on April 27, 2005 is acknowledged. The traversal is on the grounds that none of the generic claims necessitates an unduly extensive and burdensome search.
2. This is not found persuasive because claims 1, 6-11 and 15-18 are generic to thermosetting resins which encompass myriad species other than those of the epoxy resin denoted in claim 3. Thermosetting resins include such structurally and functionally diverse types as carboxyl- or hydroxyl-terminated polyesters (class 525, subclasses 525/437-449), amine- or carboxyl-terminated polyamides (class 525, subclasses 420-436), polyurethanes (class 525, subclasses 453-460), phenolic resins (class 525, subclasses 480-508), cyanate esters and bismaleimide which are separately classifiable throughout various subclasses within class 525. Even the particular kinds of epoxy resins of claim 3 are separately classifiable. The novolak epoxy resins fall within class 525, subclass 480, and the bisphenol or naphthalene epoxy resins are encompassed by class 525, subclass 523.
3. The various species of coloring agents defined in claim 4 are scattered throughout class 524 when the thermosetting resin is not an epoxy resin, and class 523, subclasses 454, 456, 457-460, 463 and 468 when the thermosetting resin is an epoxy resin.
4. The inorganic filler surface treated with a coupling agent resides in class 523, subclass 204.

Accordingly, based on the overwhelming number of searches outlined hereinabove based on the generic claims, the standard of a burdensome search has been met.

The requirement is still deemed proper and is therefore made FINAL.

5. The election filed April 27, 2005 has been misinterpreted. As indicated in the final paragraph on page 21 of the election of species requirement mailed March 21, 2005, "[a]pplicant is required under 35 U.S.C. 121 to elect a single disclosed species within each of items a) to d) hereinabove . . . ."

The election of carbon black only addresses item a). The following further elections would complete the response:

b) A particular thermosetting resin such as the HP-4032D naphthalene epoxy resin (specification, page 23, paragraph 87, line 2) with a B-570 acid anhydride curing agent (page 24, line 2) used in Sample No. 1 of Table 1 on page 27.

c) and d) A certain inorganic filler such as FB-5LDX silane-coupled filler (page 24, paragraph 90) of Sample No. 1 wherein:

- i) The type of inorganic filler is identified from the crystalline silica, fused silica, alumina or silicon nitride of claim 8 and
- ii) The species of coupling agent is selected from silane-, titanate- or aluminate-based coupling agent described on page 15, lines 4-5.

6. The species of epoxy resins set forth in claim 3 are not clearly defined by use of the term "type" which embraces modifications or derivatives not contemplated.

The deletion of the term would avoid a potential violation of 35 U.S.C. 112, second paragraph.

The election filed on April 27, 2005 is not fully responsive to the election of species requirement mailed March 21, 2005 because of the lack of identifications of species of thermosetting resins b), inorganic fillers c) and the inorganic fillers with or without the surface treatment d). See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

rs  
6/1/2005



ROBERT E.L. SELLERS  
PRIMARY EXAMINER